NAME OF WORK : DEVELOPMENT OF FOOTPATH ON MAJOR SANDEEP UNNIKRISHNAN ROAD AND RESURFACING OF ROADS AT JUDICIAL LAYOUT IN WARD NO. 04 OF YELAHANKA DIVISION (PACKAGE – 10).

Quality Control Reports

First and Final Bill

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

QC ABSTRACT

NAME OF WORK: Development of Footpath on Major Sandeep Unnikrishnan Road and Resurfacing of Roads at Judicial Layout in Ward No. 04 of yelahanka Division (Package - 10)

SL NO	Item Of Work	Name of Test	Frequency of Test/Quantity	Executed Quantity	Number of Tests Required	Number of Tests Conducted
		Materials				
1	Cement	Fineness by dry sieving	One Test		1	1
		Finess by Air permeablity method	One Test		1	1
		Density	One Test		1	1
		Standard Consistency	One Test		1	1
		Initial Setting time	One Test		1	1
		Final Setting time	One Test		1	1
		Soundness (Le Chatelier's Method)	One Test		1	1
		Compressive Strength	One Test		1	1
2	Coarse aggregate(40 mm down size)	SIEVE ANALYSIS	One Test		1	1
		Flakiness Index	One Test		1	1
		Elongation Index	One Test		1	1
		Specific Gravity	One Test		1	1
		Bulk Density(Loose)	One Test		1	1
		Bulk Density(Compacted)	One Test		1	1
		Water Absorption	One Test		1	1
3	Coarse aggregate(20 mm down size)	SIEVE ANALYSIS	One Test		1	1
		Flakiness Index	One Test		1	1
		Elongation Index	One Test		1	1
		Specific Gravity	One Test		1	1
		Bulk Density(Loose)	One Test		1	1
		Bulk Density(Compacted)	One Test		1	1
		Water Absorption	One Test		1	1
		Aggregate crushing Value	One Test		1	1
		Aggregate Impact Value	One Test		1	1
4	Fine aggregate	SIEVE ANALYSIS	One Test		1	1
		Water Absorption	One Test		1	1
		Specific Gravity	One Test		1	1
		Material finer than 75 micron	One Test		1	1
5	Steel	Bend test	One Test		1	1
		Tensile Test	One Test		1	1
		Yield Test	One Test		1	1
		ReBend test	One Test		1	1
6	Block(400*200*200)	BLOCK DENSITY	One Test		1	1
		WATER ABSORPTION	One Test		1	1
		DIMENSION ANALYSIS	One Test		1	1
		COMPRESSIVE STRENGTH	One Test		1	1
7	RCC	Core Compressive strength	One Test		1	1
		Corrected Cylinder Compressive strength	One Test		1	1
		Equivalent Cube Compressive strength	One Test		1	1
8	Precast (100mm)	Core Compressive Strength	One Test		1	1
		Corrected Cylinder Compressive Strength	One Test		1	1
		Equivalent Cube Compressive Strength	One Test		1	1

e : rechan6630@yahoo.co.in, civilproexperts@gmail.com
M : 9972924526 | Tel : +91 80 23444801 |
HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

9	Precast (250mm)	Core Compressive Strength	One Test		1	1
		Corrected Cylinder Compressive Strength	One Test		1	1
		Equivalent Cube Compressive Strength	One Test		1	1
10	PCC(M15)	Compressive Strength(7days and 28days)	7 set /100-150 cum	194.06	14	14
11	RCC(M20)	Compressive Strength(7days and 28days)	13 set /31-100 cum	470.45	26	26
12	GSB	SIEVE ANALYSIS	One Test		1	1
13	WMM	Sieve Analysis	One Test		1	1
		Impact Value	One Test		1	1
		Flakiness Index	One Test		1	1
		Elongation Index	One Test		1	1
14	DBM	SIEVE ANALYSIS	One Test		1	1
		STRIPPING VALUE	One Test		1	1
		Flakiness Index	One Test		1	1
		Elongation Index	One Test		1	1
		IMPACT VALUE	One Test		1	1
		Specific gravity	One Test		1	1
		Water Absorption	One Test		1	1
		Marshal Stability	One Test		1	1
		Marshal flow	One Test		1	1
		Percent air Voids	One Test		1	1
		Percent Voids in mineral Aggregate	One Test		1	1
		Percent Voids filled with Bitumen	One Test		1	1
		Density	One Test		1	1
		Gradation	One Test		1	1
		Compressive Strength(7days and 28days)	One Test		1	1
15	BC	SIEVE ANALYSIS	One Test		1	1
		STRIPPING VALUE	One Test		1	1
		Flakiness Index	One Test		1	1
		Elongation Index	One Test		1	1
		IMPACT VALUE	One Test		1	1
		Specific gravity	One Test		1	1
		Water Absorption	One Test		1	1
		Marshal Stability	One Test		1	1
		Marshal flow	One Test		1	1
		Percent air Voids	One Test		1	1
		Percent Voids in mineral	One Test		1	1
		Percent Voids filled with Bitumen	One Test		1	1
		Density	One Test		1	1
		Gradation	One Test		1	1
16	BITUMEN	Ductility	One Test		1	1
		Softening Point	One Test		1	1
		Penetration	One Test		1	1
		Flash Point	One Test		1	1
		Fire Point	One Test		1	1
17	TACK COAT	Rate of spread	One Test		1	1

Format No: CP/TF/01

TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

Lab ID : CP-2022-06-16-21 **Date: 28-04-2022**

Project Name : Development of Footpath on Major Sandeep Unnikrishnan Road and Resurfacing of Roads at Judicial Layout in Ward No. 04 of yelahanka Division (Package - 10)

Agency : Sri Yashwanth Gowda H S, M/S SLP Infra Engineers Pvt Ltd, #13, 2nd Cross, 2nd Stage, 1st Phase, Chandralayout, Bangalore - 560040

Customer's Reference : BBMP/EE/YNK D/EPMT-01/W.O/42/2021-22

Date of Receipt : 25-04-2022

Sample Type : Birla Super 53grade

Reference to BIS codes : IS 12269 2013, 53 Grade Ordinary Portland cement Specification .
IS 4031 (Part 1,2 3,4,5, 6,11):1988
IS 4031 Part 1 (RA 2021) DETERMINATION OF FINENESS BY DRY SIEVING, Clause 4.4
IS 4031 Part 2, (RA 2018) Determination of Fineness by Blaine Air Permeability
IS 4031 Part 3, (RA 2019) Determination of Soundness, Clause 5, Clause 6
IS 4031 Part 4, (RA 2019) Determination of Consistency of Standard Cement Paste, Clause 5
IS 4031 Part 5, (RA 2019) Determination of Initial & Final Setting Time, Clause 5
IS 4031 Part 11, (RA 2019)DETERMINATION OF DENSITY , Clause 6

Date of test : 26-04-2022

Environmental Conditions during test : Temperature 26°C
Humidity 72%

Sl.No.	Physical properties	Results	Requirement as per IS 12269: 2013
1	Fineness by dry sieving (%)	1.95	–
2	Finess by Air permeablity method (m^2/kg,Min)	285.3	225m^2/kg, Min
3	Density (gm/cc)	3.12	–
4	Standard Consistency (%)	29.5%	Not specified
5	Initial Setting time	150 minutes	Not less than 30 minutes
6	Final Setting time	245 minutes	Not more than 600 minutes
7	Soundness (Le Chatelier's Method)	1.5mm	Not more than 10 mm

• The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

CIVIL Pro Sig..... Date..... BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

Page 1/1
****End of Report****

Format No: CP/TF/01

TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

Date: 24-05-2022

Lab ID	:	**CP-2022-06-16-21**
Project Name	:	Development of Footpath on Major Sandeep Unnikrishnan Road and Resurfacing of Roads at Judicial Layout in Ward No. 04 of yelahanka Division (Package - 10)
Agency	:	Sri Yashwanth Gowda H S, M/S SLP Infra Engineers Pvt Ltd, #13, 2nd Cross, 2nd Stage, 1st Phase, Chandralayout, Bangalore - 560040
Customer's Reference	:	BBMP/EE/YNK.D/EPMT-01/W.O/42/2021-22
Date of Receipt	:	25-04-2022
Sample Type	:	Birla Super 53grade
Reference to BIS codes	:	IS 12269 2013, 53 Grade Ordinary Portland cement Specification , IS 4031 Part 4, (RA 2019) Determination of Consistency of Standard Cement Paste, Clause 5 IS 4031 Part 6, (RA 2019) Determination of Compressive Strength, Clause 6
Date of test	:	26-04-2022
Environmental Conditions during test	:	Temperature: 26°C Humidity: 72%

Compressive Strength

Sl.No.	Physical properties	Results	Requirement as per IS 12269: 2013
1	3 Days	28.5N/mm^2	Not less than 27 N/mm^2
2	7 Days	39.0N/mm^2	Not less than 37 N/mm^2
3	28 Days	58.5N/mm^2	Not less than 53 N/mm^2

• The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

CIVIL Pro Sig..... Date..... BANGALORE

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com
HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Format No: CP/TF/01

TEST REPORT ON COARSE AGGREGATES

Lab ID : CP-2022-06-16-21 **Date: 28-04-2022**

Project Name : Development of Footpath on Major Sandeep Unnikrishnan Road and Resurfacing of Roads at Judicial Layout in Ward No. 04 of yelahanka Division (Package - 10)

Agency : Sri Yashwanth Gowda H S, M/S SLP Infra Engineers Pvt Ltd, #13, 2nd Cross, 2nd Stage, 1st Phase, Chandralayout, Bangalore - 560040

Customer's Reference : BBMP/EE/YNK.D/EPMT-01/W.O/42/2021-22

Date of Receipt : 25-04-2022

Sample Type : 40mm down size coarse aggregate

Reference to BIS codes : IS: 383:2016 (Specification for Coarse and fine Aggregates)
IS: 2386 :1963(Part - 1,3,4) RA2021
IS 2386 Part 1: Particle Size and Shape
IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption
IS 2386 Part 4: Mechanical Properties

Date of test : 25-04-2022

SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 40MM DOWN COARSE AGGREGATE:

Total weight taken : 15000 grams

Sample No.	Sieve No.	Weight Retained in gms	Cumulative Weight Retained in gms	% Cumulative Weight Retained	% Passing	Required as per IS 383:2016
1	80 mm	0	0	0.0	100	100
2	40 mm	254	254	1.7	98.3	90-100
3	20 mm	5422	5676	37.8	62.2	30-70
4	10 mm	4132	9808	65.4	34.6	10-35
5	4.75 mm	4854	14662	97.7	2.3	0-5
6	Pan	338	15000	100.0	0	---

CIVIL Pro Sig..... Date..... BANGALORE

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

Format No: CP/TF/01

TEST REPORT ON COARSE AGGREGATES

Lab ID	:	**CP-2022-06-16-21** **Date: 27-04-2022**
Project Name	:	Development of Footpath on Major Sandeep Unnikrishnan Road and Resurfacing of Roads at Judicial Layout in Ward No. 04 of yelahanka Division (Package - 10)
Agency	:	Sri Yashwanth Gowda H S, M/S SLP Infra Engineers Pvt Ltd, #13, 2nd Cross, 2nd Stage, 1st Phase, Chandralayout, Bangalore - 560040
Customer Reference	:	BBMP/EE/YNK.D/EPMT-01/W.O/42/2021-22
Date of Receipt	:	25-04-2022
Sample Type/ Size	:	20mm down size coarse aggregate
Reference to BIS codes	:	IS: 383:2016 (Specification for Coarse and fine Aggregates) IS: 2386 :1963(Part - 1,3,4) RA2021 IS 2386 Part 1: Particle Size and Shape IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption IS 2386 Part 4: Mechanical Properties
Date of test	:	25-04-2022

SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 20MM DOWN COARSE AGGREGATE:

Total weight taken : 5000 grams

Sample No.	Sieve No.	Weight Retained in gms	Cumulative Weight Retained in gms	% Cumulative Weight Retained	% Passing	Required as per IS 383:2016
1	40 mm	0	0	0	100	100
2	20 mm	235	235	4.7	95.3	90-100
3	10 mm	2470	2705	54.1	45.9	25-55
4	4.75 mm	2133	4838	96.8	3.2	0-10
5	Pan	162	5000	100	0	_

CIVIL Pro Sig..... Date..... BANGALORE

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Format No: CP/TF/01

TEST REPORT OF FINE AGGREGATE

Date: 27-04-2022

Lab ID : CP-2022-06-16-21

Project Name : Development of Footpath on Major Sandeep Unnikrishnan Road and Resurfacing of Roads at Judicial Layout in Ward No. 04 of yelahanka Division (Package - 10)

Agency : Sri Yashwanth Gowda H S, M/S SLP Infra Engineers Pvt Ltd, #13, 2nd Cross, 2nd Stage, 1st Phase, Chandralayout, Bangalore - 560040

Customer's Reference : BBMP/EE/YNK.D/EPMT-01/W.O/42/2021-22

Date of Receipt : 25-04-2022

Sample Type : Fine Aggregate

Reference to BIS codes : IS 383 : 2016 (Specification for Coarse and fine Aggregates)
IS 2386 :1963(Part - 1, 3) RA2012
IS 2386 Part 1: Particle Size and Shape
IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption

Date of test : 25-04-2022

Total weight taken : 1000 grams

Sl.no	Sieve Size	Weight Retained (gms)	Cumulative Weight Retained (gms)	% Cumulative Weight Retained	% Passing	Requirement as per IS 383:2016			
						Grading Zone I	Grading Zone II	Grading Zone III	Grading Zone IV
1	10 mm	0	0	0.0	100.0	100	100	100	100
2	4.75 mm	32	32	3.2	96.8	90-100	90-100	90-100	95-100
3	2.36 mm	44	76	7.6	92.4	60-95	75-100	85-100	95-100
4	1.18 mm	215	291	29.1	70.9	30-70	55-90	75-100	90-100
5	600 micron	245	536	53.6	46.4	15-34	35-59	60-79	80-100
6	300 micron	201	737	73.7	26.3	5-20	8-30	12-40	15-50
7	150 micron	178	915	91.5	8.5	0-10	0-10	0-10	0-15
8	Pan	85	1000	100.0	0.0	---	---	---	---

Result :The tested Sample Conforms to Grading Zone II

CIVIL Pro Sig Date BANGALORE

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು,
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-106

Format No: CP/TF/01

TEST RESULTS OF STEEL

Lab ID : CP-2022-06-16-21 **Date: 27-04-2022**

Project Name : Development of Footpath on Major Sandeep Unnikrishnan Road and Resurfacing of Roads at Judicial Layout in Ward No. 04 of yelahanka Division (Package - 10)

Agency : Sri Yashwanth Gowda H S, M/S SLP Infra Engineers Pvt Ltd, #13, 2nd Cross, 2nd Stage, 1st Phase, Chandralayout, Bangalore - 560040

Customer's Reference : BBMP/EE/YNK.D/EPMT-01/W.O/42/2021-22

Date of Receipt : 25-04-2022

Sample Type : Sunvik

Reference to BIS codes : IS 1786-2008, IS:1608-2005(RA 2011), IS 1599-2019.

Date of test: : 26-04-2022

Sl.No	Identification of sample	Grade of the sample	Diameter of the steel bar	Weight of the sample	Yield stress	Tensile strength	Elongation	Bend test	Rebend test
			(mm)	(kg/m)	(N/mm2)	(N/mm2)	(%)		
1	Sunvik	Fe500	10	0.616	528	672	20.0%	Satisfactory	Satisfactory
2	Sunvik	Fe500	12	0.888	544	668	20.0%	Satisfactory	Satisfactory

* The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

CIVIL Pro Sig Date BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

End of Report

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com
HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Format No: CP/TF/01

TEST REPORT OF PRECAST COVER SLAB

Lab ID : **CP-2022-06-16-21** **Date: 18-05-2022**

Project Name : Development of Footpath on Major Sandeep Unnikrishnan Road and Resurfacing of Roads at Judicial Layout in Ward No. 04 of yelahanka Division (Package - 10)

Agency : Sri Yashwanth Gowda H S, M/S SLP Infra Engineers Pvt Ltd, #13, 2nd Cross, 2nd Stage, 1st Phase, Chandralayout, Bangalore - 560040

Customer's Reference : BBMP/EE/YNK.D/EPMT-01/W.O/42/2021-22

Date of Receipt : 14-05-2022

Sample Type /Size : Precast Cover Slab (250 mm Thick)

Reference to BIS codes : IS: 516 - 1959 (RA 2018) Methods of Tests for Strength of Concrete

Date of test : 14/05/2022

Sl. No.	Identification Mark	Diameter of the core	Height of the core	Weight of the core	Area	Failure Load	Core Compressive strength	Corrected Cylinder Compressive strength	Equivalent Cube Compressive strength
		(mm)	(mm)	(kg)	(Sq.mm)	(KN)	(N/mm^2)	(N/mm^2)	(N/mm^2)
1	Cover Slab-1	200.56	250.36	3.119	31586	680.5	21.5	20.0	25.0
2	Cover Slab-2	200.82	250.54	3.128	31668	695.5	22.0	20.4	25.5
3	Cover Slab-3	200.94	250.69	3.163	31706	720.5	22.7	21.1	26.4

* The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

ಸಹಾಯಕ ಆಯುಕ್ತರಾಲಕ ಆಡಳಿತಾಧಿಕಾರಿ
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-106

CIVIL Pro Sig Date BANGALORE

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID : CP-2022-06-16-21 **Date: 24/06/2022**

Project Name : Development of Footpath on Major Sandeep Unnikrishnan Road and Resurfacing of Roads at Judicial Layout in Ward No. 04 of yelahanka Division (Package - 10)

Agency : Sri Yashwanth Gowda H S, M/S SLP Infra Engineers Pvt Ltd, #13, 2nd Cross, 2nd Stage, 1st Phase, Chandralayout, Bangalore - 560040

Customer's Reference : BBMP/EE/YNK.D/EPMT-01/W.O/42/2021-22

Date of Receipt : 20-06-2022

Customer ID : PCC for Kerb stone

Sample Type /Size : 150X150X150 mm

Sample grade/Age : M15 / 7 Days Compressive Strength

Reference to BIS codes : IS: 516 - 1959 (RA 2018) Methods of Tests for Strength of Concrete Cl.5

Date of test : 24/06/2022

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
1	PCC for Kerb stone	M15	17/06/2022	24/06/2022	149.34 X 151.19 X 151.60	22579	9.094	287.7	12.7	12.5
2	PCC for Kerb stone	M15	17/06/2022	24/06/2022	150.39 X 151.57 X 149.98	22795	8.113	278.9	12.2	
3	PCC for Kerb stone	M15	17/06/2022	24/06/2022	151.36 X 149.14 X 149.52	22574	8.413	281.9	12.5	

• The results obtained are satisfactory as per standard requirements.

ಸಹಾಯಕ ಆಯುಕ್ತರು ಯಲಹಂಕ ವಲಯ ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ, ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-106

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

CIVIL Pro Sig..... Date..... BANGALORE

Page 1/1
****End of Report****

CEMENT CONCRETE PRECAST CONCRETE BLOCKS FOR PAVING

Lab ID : **CP-2022-06-16-21** **Date: 22-06-2022**

Project Name : Development of Footpath on Major Sandeep Unnikrishnan Road and Resurfacing of Roads at Judicial Layout in Ward No. 04 of yelahanka Division (Package - 10)

Agency : Sri Yashwanth Gowda H S, M/S SLP Infra Engineers Pvt Ltd, #13, 2nd Cross, 2nd Stage, 1st Phase, Chandralayout, Bangalore - 560040

Customer Reference : BBMP/EE/YNK.D/EPMT-01/W.O/42/2021-22

Date of Receipt : 17-06-2022

Sample Type/ Size : Precast concrete blocks for paving (Heavy Duty Cobbal Stone)

Reference to BIS codes : IS 15658:2021

Date of test : 17-06-2022

1.Compressive Strength

Sl.No.	Dimension (mm)			Compressive Strength	Average
	L	B	T	(N/mm²)	(N/mm²)
1	197.22	159.88	75.99	32.5	33.1
2	198.48	159.64	75.25	33.8	
3	199.54	159.54	75.48	32.5	
4	197.68	159.22	75.55	33.5	
5	198.11	159.87	75.32	32.8	
6	198.18	160.02	75.11	33.4	
7	198.45	158.99	75.98	33.2	
8	197.22	159.22	75.12	32.8	

2. Water Absorption

Sl.No.	Wet Weight	Dry weight	Thickness	Water Absorption (%)	Average (%)
1	4.987	4.828	75.85	3.29	3.64
2	4.898	4.721	75.22	3.75	
3	4.988	4.802	75.44	3.37	

* The results obtained are satisfactory as per standard requirements.

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬ ಬ ಗ ಪ ಪಿಂಗಳೂರು-106

CIVIL Pro Sig Date BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

Page 1/1
End of Report

Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID : CP-2022-06-16-21 **Date: 24/06/2022**

Project Name : Development of Footpath on Major Sandeep Unnikrishnan Road and Resurfacing of Roads at Judicial Layout in Ward No. 04 of yelahanka Division (Package - 10)

Agency : Sri Yashwanth Gowda H S, M/S SLP Infra Engineers Pvt Ltd, #13, 2nd Cross, 2nd Stage, 1st Phase, Chandralayout, Bangalore - 560040

Customer's Reference : BBMP/EE/YNK.D/EPMT-01/W.O/42/2021-22

Date of Receipt : 20-06-2022

Customer ID : PCC for Kerb stone

Sample Type /Size : 150X150X150 mm

Sample grade/Age : M15 / 7 Days Compressive Strength

Reference to BIS codes : IS: 516 - 1959 (RA 2018) Methods of Tests for Strength of Concrete Cl.5

Date of test : 24/06/2022

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen	Cross sectional area	Weight of the sample	Failure Load	Compressive strength	Average Compressive Strength
					(mm)	(Sq.mm)	(kg)	(KN)	(N/mm^2)	(N/mm^2)
1	PCC for Kerb stone	M15	17/06/2022	24/06/2022	149.62 X 151.40 X 150.74	22653	9.096	280.3	12.4	12.4
2	PCC for Kerb stone	M15	17/06/2022	24/06/2022	151.47 X 151.60 X 150.16	22963	8.345	279.1	12.2	
3	PCC for Kerb stone	M15	17/06/2022	24/06/2022	150.51 X 151.11 X 149.58	22743	9.025	287.7	12.6	

* The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

CIVIL Pro Sig Date BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID : CP-2022-06-16-21 **Date: 16/07/2022**

Project Name : Development of Footpath on Major Sandeep Unnikrishnan Road and Resurfacing of Roads at Judicial Layout in Ward No. 04 of yelahanka Division (Package - 10)

Agency : Sri Yashwanth Gowda H S, M/S SLP Infra Engineers Pvt Ltd, #13, 2nd Cross, 2nd Stage, 1st Phase, Chandralayout, Bangalore - 560040

Customer's Reference : BBMP/EE/YNK D/EPMT-01/W.O/42/2021-22

Date of Receipt : 20-06-2022

Customer ID : PCC for Kerb stone

Sample Type /Size : 150X150X150 mm

Sample grade/Age : M15 / 28 Days Compressive Strength

Reference to BIS codes : IS: 516 - 1959 (RA 2018) Methods of Tests for Strength of Concrete Cl.5

Date of test : 16/07/2022

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
1	PCC for Kerb stone	M15	18/06/2022	16/07/2022	151.71 X 149.93 X 151.99	22746	8.407	391.9	17.2	17.4
2	PCC for Kerb stone	M15	18/06/2022	16/07/2022	151.28 X 149.35 X 150.74	22593	8.746	393.3	17.4	
3	PCC for Kerb stone	M15	18/06/2022	16/07/2022	151.53 X 150.34 X 151.97	22782	8.230	399.8	17.5	

• The results obtained are satisfactory as per standard requirements.

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪವಿಭಾಗ ಬಿಬಿಎಂಪಿ.
ಬಿ.ಇ.ಒ. ಬೆಂಗಳೂರು-೬೫

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

CIVIL Pro Sig..... Date..... BANGALORE

Page 1/1
****End of Report****

Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID : CP-2022-06-16-21 Date: 27/06/2022

Project Name : Development of Footpath on Major Sandeep Unnikrishnan Road and Resurfacing of Roads at Judicial Layout in Ward No. 04 of yelahanka Division (Package - 10)

Agency : Sri Yashwanth Gowda H S, M/S SLP Infra Engineers Pvt Ltd, #13, 2nd Cross, 2nd Stage, 1st Phase, Chandralayout, Bangalore - 560040

Customer's Reference : BBMP/EE/YNK D/EPMT-01/W O/42/2021-22

Date of Receipt : 22-06-2022

Customer ID : PCC for Kerb stone

Sample Type /Size : 150X150X150 mm

Sample grade/Age : M15 / 7 Days Compressive Strength

Reference to BIS codes : IS: 516 - 1959 (RA 2018) Methods of Tests for Strength of Concrete Cl 5

Date of test : 27/06/2022

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
1	PCC for Kerb stone	M15	20/06/2022	27/06/2022	150.57 X 150.44 X 150.21	22652	8.263	280.5	12.4	12.4
2	PCC for Kerb stone	M15	20/06/2022	27/06/2022	150.70 X 151.80 X 150.58	22876	8.583	280.6	12.3	
3	PCC for Kerb stone	M15	20/06/2022	27/06/2022	150.25 X 149.04 X 151.60	22394	9.029	278.2	12.4	

* The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

CIVIL Pro Sig..... Date..... BANGALORE

Page 1/1
****End of Report****

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID : CP-2022-06-16-21 **Date: 02/06/2022**

Project Name : Development of Footpath on Major Sandeep Unnikrishnan Road and Resurfacing of Roads at Judicial Layout in Ward No. 04 of yelahanka Division (Package - 10)

Agency : Sri Yashwanth Gowda H S, M/S SLP Infra Engineers Pvt Ltd, #13, 2nd Cross, 2nd Stage, 1st Phase, Chandralayout, Bangalore - 560040

Customer's Reference : BBMP/EE/YNK.D/EPMT-01/W.O/42/2021-22

Date of Receipt : 07-05-2022

Customer ID : Drain Bottom Raft- Sandep Unnikrishnan Road 2nd B Cross Road

Sample Type /Size : 150X150X150 mm

Sample grade/Age : M20 / 28 Days Compressive Strength

Reference to BIS codes : IS: 516 - 1959 (RA 2018) Methods of Tests for Strength of Concrete C1.5

Date of test : 02/06/2022

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
1	Drain Bottom Raft-Sandep Unnikrishnan Road 2nd B Cross Road	M20	05/05/2022	02/06/2022	150.11 X 150.09 X 150.91	22530	8.958	519.6	23.1	22.9
2	Drain Bottom Raft-Sandep Unnikrishnan Road 2nd B Cross Road	M20	05/05/2022	02/06/2022	151.43 X 150.23 X 149.45	22751	8.833	513.2	22.6	
3	Drain Bottom Raft-Sandep Unnikrishnan Road 2nd B Cross Road	M20	05/05/2022	02/06/2022	150.91 X 151.23 X 150.45	22822	8.606	527.9	23.1	

* The results obtained are satisfactory as per standard requirements.

ಸಹಾಯಕ ಕಾರ್ಯ ಪಾಲನ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ.
ಬ.ಮ.ನ.ಪ. ಬೆಂಗಳೂರು-106

FOR CIVIL Pro.

CIVIL Pro Sig Date BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

Page 1/1
****End of Report****

Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID : CP-2022-06-16-21 **Date: 12/05/2022**

Project Name : Development of Footpath on Major Sandeep Unnikrishnan Road and Resurfacing of Roads at Judicial Layout in Ward No. 04 of yelahanka Division (Package - 10)

Agency : Sri Yashwanth Gowda H S, M/S SLP Infra Engineers Pvt Ltd, #13, 2nd Cross, 2nd Stage, 1st Phase, Chandralayout, Bangalore - 560040

Customer's Reference : BBMP/EE/YNK.D/EPMT-01/W.O/42/2021-22

Date of Receipt : 07-05-2022

Customer ID : Drain Bottom Raft- Sandep Unnikrishnan Road 2nd B Cross Road

Sample Type /Size : 150X150X150 mm

Sample grade/Age : M20 / 7 Days Compressive Strength

Reference to BIS codes : IS: 516 - 1959 (RA 2018) Methods of Tests for Strength of Concrete Cl.5

Date of test : 12/05/2022

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
1	Drain Bottom Raft-Sandep Unnikrishnan Road 2nd B Cross Road	M20	05/05/2022	12/05/2022	149.75 X 151.09 X 151.41	22626	8.553	413.1	18.3	18.7
2	Drain Bottom Raft-Sandep Unnikrishnan Road 2nd B Cross Road	M20	05/05/2022	12/05/2022	149.35 X 151.54 X 149.94	22632	8.686	429.7	19.0	
3	Drain Bottom Raft-Sandep Unnikrishnan Road 2nd B Cross Road	M20	05/05/2022	12/05/2022	150.16 X 150.48 X 149.60	22597	8.844	428.3	19.0	

- The results obtained are satisfactory as per standard requirements.

ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬಿ.ಬಿ.ಎಂ.ಪಿ ಬೆಂಗಳೂರು-106

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

CIVIL Pro Sig Date BANGALORE

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com
HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID : CP-2022-06-16-21 Date: 14/05/2022

Project Name : Development of Footpath on Major Sandeep Unnikrishnan Road and Resurfacing of Roads at Judicial Layout in Ward No. 04 of yelahanka Division (Package - 10)

Agency : Sri Yashwanth Gowda H S, M/S SLP Infra Engineers Pvt Ltd, #13, 2nd Cross, 2nd Stage, 1st Phase, Chandralayout, Bangalore - 560040

Customer's Reference : BBMP/EE/YNK D/EPMT-01/W.O/42/2021-22

Date of Receipt : 09-05-2022

Customer ID : Drain Bottom Raft- Sandep Unnikrishnan Road 2nd A Cross Road

Sample Type /Size : 150X150X150 mm

Sample grade/Age : M20 / 7 Days Compressive Strength

Reference to BIS codes : IS: 516 - 1959 (RA 2018) Methods of Tests for Strength of Concrete Cl 5

Date of test : 14/05/2022

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
1	Drain Bottom Raft-Sandep Unnikrishnan Road 2nd A Cross Road	M20	07/05/2022	14/05/2022	151.12 X 150.34 X 149.44	22718	8.358	417.9	18.4	18.4
2	Drain Bottom Raft-Sandep Unnikrishnan Road 2nd A Cross Road	M20	07/05/2022	14/05/2022	149.31 X 150.83 X 150.14	22521	9.095	417.3	18.5	
3	Drain Bottom Raft-Sandep Unnikrishnan Road 2nd A Cross Road	M20	07/05/2022	14/05/2022	150.58 X 149.57 X 149.64	22522	8.218	409.6	18.2	

• The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

CIVIL Pro Sig Date BANGALORE

****End of Report****

Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID : CP-2022-06-16-21 **Date: 04/06/2022**

Project Name : Development of Footpath on Major Sandeep Unnikrishnan Road and Resurfacing of Roads at Judicial Layout in Ward No. 04 of yelahanka Division (Package - 10)

Agency : Sri Yashwanth Gowda H S, M/S SLP Infra Engineers Pvt Ltd, #13, 2nd Cross, 2nd Stage, 1st Phase, Chandralayout, Bangalore - 560072

Customer's Reference : BBMP/EE/YNK.D/EPMT-01/W.O/42/2021-22

Date of Receipt : 09-05-2022

Customer ID : Drain Bottom Raft- Sandep Unnikrishnan Road 2nd A Cross Road

Sample Type /Size : 150X150X150 mm

Sample grade/Age : M20 / 28 Days Compressive Strength

Reference to BIS codes : IS: 516 - 1959 (RA 2018) Methods of Tests for Strength of Concrete Cl 5

Date of test : 04/06/2022

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
1	Drain Bottom Raft-Sandep Unnikrishnan Road 2nd A Cross Road	M20	07/05/2022	04/06/2022	149.47 X 149.25 X 150.59	22308	8.336	523.8	23.5	23.2
2	Drain Bottom Raft-Sandep Unnikrishnan Road 2nd A Cross Road	M20	07/05/2022	04/06/2022	150.10 X 149.51 X 149.98	22441	8.806	510.7	22.8	
3	Drain Bottom Raft-Sandep Unnikrishnan Road 2nd A Cross Road	M20	07/05/2022	04/06/2022	150.29 X 150.72 X 151.67	22652	8.780	531.7	23.5	

* The results obtained are satisfactory as per standard requirements.

ಕರ್ನಾಟಕ ಕಾರ್ಯ ಮಂಡಲ ಕಾರ್ಯಾಲಯ
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ.
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-106

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

CIVIL Pro Sig ..... Date ..... BANGALORE

Page 1/1
****End of Report****

Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID : CP-2022-06-16-21 **Date: 16/05/2022**

Project Name : Development of Footpath on Major Sandeep Unnikrishnan Road and Resurfacing of Roads at Judicial Layout in Ward No. 04 of yelahanka Division (Package - 10)

Agency : Sri Yashwanth Gowda H S, M/S SLP Infra Engineers Pvt Ltd, #13, 2nd Cross, 2nd Stage, 1st Phase, Chandralayout, Bangalore - 560040

Customer's Reference : BBMP/EE/YNK.D/EPMT-01/W.O/42/2021-22

Date of Receipt : 11-05-2022

Customer ID : DrainSide Wall- Sandep Unnikrishnan Road 2nd A Cross Road

Sample Type /Size : 150X150X150 mm

Sample grade/Age : M20 / 7 Days Compressive Strength

Reference to BIS codes : IS: 516 - 1959 (RA 2018) Methods of Tests for Strength of Concrete Cl 5

Date of test : 16/05/2022

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
1	DrainSide Wall-Sandep Unnikrishnan Road 2nd A Cross Road	M20	09/05/2022	16/05/2022	151.58 X 150.79 X 149.03	22857	8.970	431.8	18.9	18.8
2	DrainSide Wall-Sandep Unnikrishnan Road 2nd A Cross Road	M20	09/05/2022	16/05/2022	149.40 X 151.25 X 150.36	22596	8.417	428.9	19.0	
3	DrainSide Wall-Sandep Unnikrishnan Road 2nd A Cross Road	M20	09/05/2022	16/05/2022	151.18 X 149.57 X 151.27	22612	8.902	416.4	18.4	

* The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

CIVIL Pro Sig..... Date..... BANGALORE

RAKARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com
HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID : CP-2022-06-16-21 **Date: 13/05/2022**

Project Name : Development of Footpath on Major Sandeep Unnikrishnan Road and Resurfacing of Roads at Judicial Layout in Ward No. 04 of yelahanka Division (Package - 10)

Agency : Sri Yashwanth Gowda H S, M/S SLP Infra Engineers Pvt Ltd, #13, 2nd Cross, 2nd Stage, 1st Phase, Chandralayout, Bangalore - 560040

Customer's Reference : BBMP/EE/YNK.D/EPMT-01/W.O/42/2021-22

Date of Receipt : 09-05-2022

Customer ID : Culvert Bottom Raft- 2nd B Cross Road

Sample Type /Size : 150X150X150 mm

Sample grade/Age : M20 / 7 Days Compressive Strength

Reference to BIS codes : IS: 516 - 1959 (RA 2018) Methods of Tests for Strength of Concrete Cl.5

Date of test : 13/05/2022

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
1	Culvert Bottom Raft-2nd B Cross Road	M20	06/05/2022	13/05/2022	151.86 X 151.74 X 151.73	23043	8.522	434.3	18.8	18.7
2	Culvert Bottom Raft-2nd B Cross Road	M20	06/05/2022	13/05/2022	149.24 X 151.44 X 150.70	22602	8.288	419.2	18.5	
3	Culvert Bottom Raft-2nd B Cross Road	M20	06/05/2022	13/05/2022	150.68 X 151.25 X 150.76	22791	8.684	427.5	18.8	

* The results obtained are satisfactory as per standard requirements.

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು,
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬಿ.ಬಿ.ಎಂ.ಪಿ, ಬೆಂಗಳೂರು-106

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

Page 1/1
****End of Report****

Format No: CP/TF/01

TEST REPORT ON PHYSICAL REQUIREMENTS OF SOLID CONCRETE BLOCKS

Lab ID	:	CP-2022-06-16-21 **Date: 11-06-2022**
Project Name	:	Development of Footpath on Major Sandeep Unnikrishnan Road and Resurfacing of Roads at Judicial Layout in Ward No. 04 of yelahanka Division (Package - 10)
Agency	:	Sri Yashwanth Gowda H S, M/S SLP Infra Engineers Pvt Ltd, #13, 2nd Cross, 2nd Stage, 1st Phase, Chandralayout, Bangalore - 560040
Customer's Reference	:	BBMP/EE/YNK.D/EPMT-01/W.O/42/2021-22
Date of Receipt	:	07-06-2022
Sample Type/Size	:	Solid concrete blocks size (400X150X200)mm
Reference to BIS codes	:	IS 2185 (Part 1) 2005(RA 2020) Concrete Masonry Specification Part 1 Hollow and Solid Concrete Blocks (Dimensions -Annex-B, Clause 9.2 and 10 , Block density Annex -C Clause 9.3 and10, Compressive strength Annex -D Clause 9.4 and 10, Water absorption Annex -E Clause 9.5 and 10)
Date of test	:	07-06-2022

BLOCK DENSITY:

Sl. No.	Measurement of overall Dimensions of Individual Blocks			Overall Volume of the Block in Cubic Centimetres	Weight of Oven Dried Block in Kilograms to the nearest 10 Gram	Block Density in Kg/cum*10^6	Avg.Block Density in (Kg/cum)	As per IS 2185(Part 1) :2005 (RA 2010)
	Length	Breadth	Height					
	mm	mm	mm	(Cm^3)	Kg	Kg/m^3	Kg/m^3	
1	401	153	200	12271	24.62	2006.8	1967.7	Not less than 1800Kg/m^3
2	402	150	201	12120	23.82	1965.7		
3	398	151	201	12080	23.32	1930.6		

WATER ABSORPTION:

Sl. No.	Wet weight after water absorption	Dry weight (Oven dry)	Water Absorption	Avg.Water Absorption	As per IS 2185(Part 1):2005 (RA 2010)
	kg	kg	%	%	
1	24.09	23.03	4.40	4.18	Shall not be more than 10% by mass
2	24.95	24.00	3.82		
3	22.73	21.75	4.30		

CIVIL Pro Sig..... Date..... BANGALORE

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

TEST RESULTS OF GRADATION FOR WMM

Lab ID : CP-RW-2022-06-16-21 **Date: 02-06-2022**

Project Name : Development of Footpath on Major Sandeep Unnikrishnan Road and Resurfacing of Roads at Judicial Layout in Ward No. 04 of yelahanka Division (Package - 10)

Agency : Sri Yashwanth Gowda H S, M/S SLP Infra Engineers Pvt Ltd, #13, 2nd Cross, 2nd Stage, 1st Phase, Chandralayout, Bangalore - 560040

Customer Reference : BBMP/EE/YNK.D/EPMT-01/W.O/42/2021-22

Date of Receipt : 31-05-2022

Type of Mix : WMM (Wet Mix Macadam)

Date of test : 31-05-2022

Oven Dry Weight : 11000 Grams

IS Sieve Size(mm)	Weight Retained (gm)	Cumulative Weight Retained (gm)	% Cumulative Weight Retained	% Passing	Spec.I.Vide Table 400.13 MORTH Specification
53	0	0	0.0	100.0	100
45	315	315	2.9	97.1	95-100
22.4	2259	2574	23.4	76.6	60-80
11.2	2179	4753	43.2	56.8	40-60
4.75	2251	7004	63.7	36.3	25-40
2.36	1621	8625	78.4	21.6	15-30
0.6	623	9248	84.1	15.9	8-22
0.075	1338	10586	96.2	3.8	0-5

* The results obtained are satisfactory as per standard requirements.

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬಿ.ಬಿ.ಎಂ.ಪಿ, ಬೆಂಗಳೂರು-106

CIVIL Pro Sig Date BANGALORE

FOR CIVIL Pro.
R KARTHIK RECHAN
Authorized Signatory
Quality Manager

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com
HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

TEST RESULTS OF GRADATION FOR WMM

Lab ID : CP-RW-2022-06-16-21 **Date: 04-06-2022**

Project Name : Development of Footpath on Major Sandeep Unnikrishnan Road and Resurfacing of Roads at Judicial Layout in Ward No. 04 of yelahanka Division (Package - 10)

Agency : Sri Yashwanth Gowda H S, M/S SLP Infra Engineers Pvt Ltd, #13, 2nd Cross, 2nd Stage, 1st Phase, Chandralayout, Bangalore - 560040

Customer Reference : BBMP/EE/YNK.D/EPMT-01/W.O/42/2021-22

Date of Receipt : 02-06-2022

Type of Mix : WMM (Wet Mix Macadam)

Date of test : 02-06-2022

Oven Dry Weight : 11000 Grams

IS Sieve Size(mm)	Weight Retained (gm)	Cumulative Weight Retained (gm)	% Cumulative Weight Retained	% Passing	Spec.I.Vide Table 400.13 MORTH Specification
53	0	0	0.0	100.0	100
45	490	490	4.5	95.5	95-100
22.4	2298	2788	25.3	74.7	60-80
11.2	1796	4584	41.7	58.3	40-60
4.75	2063	6647	60.4	39.6	25-40
2.36	1258	7905	71.9	28.1	15-30
0.6	860	8765	79.7	20.3	8-22
0.075	1798	10563	96.0	4.0	0-5

• The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

CIVIL PRO BANGALORE Sig ..... Date .....

R. KARTHIK RECHAN
Authorized Signatory
Quality Manager

Page 1/1
End of Report

DETERMINATION OF FLAKINESS INDEX AND ELONGATION INDEX OF COARSE AGGREGATE(IS 2386 (Part 1) 1963 (RA 2007)

Lab ID : **CP-RW-2022-06-16-21** **Date: 02-06-2022**

Project Name : Development of Footpath on Major Sandeep Unnikrishnan Road and Resurfacing of Roads at Judicial Layout in Ward No. 04 of yelahanka Division (Package - 10)

Agency : Sri Yashwanth Gowda H S, M/S SLP Infra Engineers Pvt Ltd, #13, 2nd Cross, 2nd Stage, 1st Phase, Chandralayout, Bangalore - 560040

Customer Reference : BBMP/EE/YNK.D/EPMT-01/W.O/42/2021-22

Date of Receipt : 31-05-2022

Type of Mix : Coarse Aggregate for WMM (Wet Mix Macadam)

Date of test : 31-05-2022

Result:

Index	Percentage of Flakiness and Elongation Index	Secified limits as per MORTH specification table 400-12
Flakiness Index	12.6%	Combined Flakiness & Elongation Index for WMM is Maximum 35%
Elongation Index	12.7%	
Combined Flakiness and Elongation Index for WMM	25.3%	

* The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

CIVIL Pro Sig ..... Date ..... BANGALORE

End of Report

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com
HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

TEST RESULTS OF GRADATION FOR DBM
(IS 2386:(Part 1) 1963 (RA2011)

Lab ID : CP-RW-2022-06-16-21 **Date: 13-06-2022**

Project Name : Development of Footpath on Major Sandeep Unnikrishnan Road and Resurfacing of Roads at Judicial Layout in Ward No. 04 of yelahanka Division (Package - 10)

Agency : Sri Yashwanth Gowda H S, M/S SLP Infra Engineers Pvt Ltd, #13, 2nd Cross, 2nd Stage, 1st Phase, Chandralayout, Bangalore - 560040

Customer Reference : BBMP/EE/YNK.D/EPMT-01/W.O/42/2021-22

Date of Receipt : 10-06-2022

Type of Mix : DBM-Plant (Dense Bituminous Macadam)

Date of test : 10-06-2022

Weight of Sample : 5000 Grams

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Specification Limits as per MORTH specification Table 500-10 (grading -2)
37.5	0	0	0	100	100
26.5	280	280	5.60	94.40	90-100
19	250	530	10.60	89.40	71-95
13.2	520	1050	21.00	79.00	56-80
4.75	1653	2703	54.06	45.94	38-54
2.36	350	3053	61.06	38.94	28-42
0.3	1269	4322	86.44	13.56	7-21
0.075	290	4612	92.24	7.76	2-8
PAN	150	4762	0.00	0	0

* The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro
R KARTHIK RECHAN
Authorized Signatory
Quality Manager

CIVIL Pro Sig..... Date..... BANGALORE

Page 1/1
End of Report

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

TEST REPORT OF AGGEGRATE STRIPPING VALUE OF ROAD AGGRGATE (IS:6241)

Lab ID : CP-RW-2022-06-16-21 **Date: 13-06-2022**

Project Name : Development of Footpath on Major Sandeep Unnikrishnan Road and Resurfacing of Roads at Judicial Layout in Ward No. 04 of yelahanka Division (Package - 10)

Agency : Sri Yashwanth Gowda H S, M/S SLP Infra Engineers Pvt Ltd, #13, 2nd Cross, 2nd Stage, 1st Phase, Chandralayout, Bangalore - 560040

Customer Reference : BBMP/EE/YNK.D/EPMT-01/W.O/42/2021-22

Date of Receipt : 10-06-2022

Type of Mix : DBM(Dense Bituminous Macadam)

Date of test : 10-06-2022

Type of Binder : 60/70

% of Binder Used : 5.0%

Weight of Aggregate : 200.0 gm

Weight of Binder : 10.0 gm

Temperature of water bath : 40°C

No of test	Retained Stripping Percentage	Stripping Percentage	Average Retained Stripping Percentage	Secified limits as per MORTH specification table 500-8
1	98.0	2.0	98.2	Minimum Retained Coating 95%
2	98.5	1.5		
3	98.0	2.0		

• The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

CIVIL Pro Sig..... Date..... BANGALORE

R.KARTHIK RECHAN
Authorized Signatory
Quality Manager

ಸಹಾಯಕ ಆಯುಕ್ತರು ಆಯುಕ್ತರ ಕಛೇರಿ
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ
ಜಿ.ಬಿ.ಎ.ಪಿ. ಬೆಂಗಳೂರು-106

Page 1/1
****End of Report****

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

TEST RESULTS OF GRADATION FOR BC
IS 2386 (Part 1) 1963 (RA 2007)

Lab ID : CP-RW-2022-06-16-21 **Date: 20-06-2022**

Project Name : Development of Footpath on Major Sandeep Unnikrishnan Road and Resurfacing of Roads at Judicial Layout in Ward No. 04 of yelahanka Division (Package - 10)

Agency : Sri Yashwanth Gowda H S, M/S SLP Infra Engineers Pvt Ltd, #13, 2nd Cross, 2nd Stage, 1st Phase, Chandralayout, Bangalore - 560040

Customer Reference : BBMP/EE/YNK.D/EPMT-01/W O/42/2021-22

Date of Receipt : 17-06-2022

Type of Mix : BC-Plant (Bituminous Concrete)

Date of test : 17-06-2022

Oven Dry Weight : 5000 Grams

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Secified limits as per MORTH specification table 500-17(grading-2)
19	0	0	0.0	100.0	100
13.2	79	79	1.6	98.4	90-100
9.5	605	684	13.7	86.3	70-88
4.75	810	1494	29.9	70.1	53-71
2.36	650	2144	42.9	57.1	42-58
1.18	495	2639	52.8	47.2	34-48
0.6	820	3459	69.2	30.8	26-38
0.3	495	3954	79.1	20.9	18-28
0.15	435	4389	87.8	12.2	12-20
0.075	435	4824	96.5	3.5	4-10
PAN	175	4999	100	0.0	0

• The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro
R KARTHIK RECHAN
Authorized Signatory
Quality Manager

CIVIL Pro Sig Date BANGALORE

Page 1/1
End of Report

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

TESTS RESULTS ON STABILITY OF MIX

Lab ID : **CP-RW-2022-06-16-21** **Date: 20-06-2022**

Project Name : Development of Footpath on Major Sandeep Unnikrishnan Road and Resurfacing of Roads at Judicial Layout in Ward No. 04 of yelahanka Division (Package - 10)

Agency : Sri Yashwanth Gowda H S, M/S SLP Infra Engineers Pvt Ltd, #13, 2nd Cross, 2nd Stage, 1st Phase, Chandralayout, Bangalore - 560040

Customer Reference : BBMP/EE/YNK D/EPMT-01/W.O/42/2021-22

Date of Receipt : 17-06-2022

Type of Mix : BC (Bituminous Concrete)

Date of test : 17-06-2022

The results of the tests conducted on the Bituminous Concrete mix sample are as follow

Sl.No	Particulars of observations	TEST 1	TEST 2	Secified limits as per MORTH specification table 500-11
1	Marshal Stability at 60°C, KN	11.14	11.13	10KN(min)
2	Marshal flow at 60°C, mm	3.52	3.51	2-4
3	Percent air Voids	4.82	4.83	3-5
4	Percent Voids in mineral Aggregate(VMA %)	14.28	14.26	13-15
5	Percent Voids filled with Bitumen(VFB %)	71.87	71.63	65-75
6	Density, g/cc	2.25	2.26	–

* The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro

CIVIL Pro Sig Date BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

Page 1/1
End of Report

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

Package -

Remarks

Lab ID : CP-RW-2022-06-16-21 **Date: 28-06-2022**

AFTER EXTRACTION(Trail-1)

Weight of Sample(gm) : 478

IS Sieve Size(mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Specification Limits as per MORTH specification Table 500-10(grading -2)
37.5	0	0	0	100.0	100
26.5	14.4	14.4	3.01	97.0	90-100
19	24	38.4	8.03	92.0	71-95
13.2	120	158.4	33.14	66.9	56-80
4.75	96	254.4	53.22	46.8	38-54
2.36	80	334.4	69.96	30.0	28-42
0.3	62.4	396.8	83.01	17.0	7-21
0.075	52.8	449.6	94.06	5.9	2-8

AFTER EXTRACTION(Trail-2)

Weight of Sample(gm) : 476

IS Sieve Size(mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Specification Limits as per MORTH specification Table 500-10(grading -2)
37.5	0	0	0	100.0	100
26.5	14.8	14.8	3.11	96.9	90-100
19	24	38.8	8.15	91.8	71-95
13.2	120	158.8	33.36	66.6	56-80
4.75	96	254.8	53.53	46.5	38-54
2.36	78	332.8	69.92	30.1	28-42
0.3	62.4	395.2	83.03	17.0	7-21
0.075	52.8	448	94.12	5.9	2-8

• The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.
R KARTHIK RECHAN
Authorized Signatory
Quality Manager

CIVIL Pro Sig Date BANGALORE

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು.
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ.
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-106

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Package -

Remarks

DETERMINATION OF RATE OF SPREAD TACK COAT

Lab ID : CP-RW-2022-06-16-21 **Date: 01-07-2022**

Project Name : Development of Footpath on Major Sandeep Unnikrishnan Road and Resurfacing of Roads at Judicial Layout in Ward No. 04 of yelahanka Division (Package - 10)

Agency : Sri Yashwanth Gowda H S, M/S SLP Infra Engineers Pvt Ltd. #13, 2nd Cross, 2nd Stage, 1st Phase, Chandralayout, Bangalore - 560040

Customer Reference : BBMP/EE/YNK D/EPMT-01/W.O/42/2021-22

Date of Receipt : 30-06-2022

Type of Mix : Tack coat

Date of test : 30-06-2022

Sl.No	Determination	Unit	TEST 1	TEST 2
1	Size of Plate (mxm)	Mt	0.30 x 30	0.30 x 30
2	Area of Plate (a)	Sq mtr	0.09	0.09
3	Initial Wt of empty Plate (b)	Kg	0.78	0.748
4	Final weight of plate after application of tack Coat (c)	Kg	0.804	0.772
5	Weight of tack Coat (d=c-b)	Kg	0.024	0.024
6	Rate of spread of tack coat	Kg/sq m	0.267	0.267
7	Average	Kg/sq m	0.267	
8	Specified Limit	Kg/sq m	0.250 Kg/sq m	

* The results obtained are satisfactory as per standard requirements.

CIVIL Pro Sign Date: BANGALORE

FOR CIVIL Pro.
K.KARTHIK RECHAN
Authorized Signatory
Quality Manager

Page 1/1
End of Report

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ
ಯಲಹಂಕ ಉಪವಿಭಾಗ ಉಪವಿಭಾಗ.
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-10೯

TEST RESULTS OF BITUMEN BINDAR CONTENT AND GRADATION FOR BC
IS 2386 (Part 1) 1963 (RA 2011)

Lab ID : CP-RW-2022-06-16-21 **Date: 04-07-2022**

Project Name : Development of Footpath on Major Sandeep Unnikrishnan Road and Resurfacing of Roads at Judicial Layout in Ward No. 04 of yelahanka Division (Package - 10)

Agency : Sri Yashwanth Gowda H S, M/S SLP Infra Engineers Pvt Ltd, #13, 2nd Cross, 2nd Stage, 1st Phase, Chandra layout, Bangalore - 560040

Customer Reference : BBMP/EE/YNK.D/EPMT-01/W.O/42/2021-22

Date of Receipt : 30-06-2022

Type of Mix : BC (Bituminous Concrete)

Date of test : 30-06-2022

Sl.no	Description	Index	Trail 1	Trail 2
1	Weight of the Sample	A	500	500
2	Weight of the sample After extraction	B	473	472
3	Bitumen percentage	$\frac{A-B}{A} \times 100$	5.40	5.60
4	Average percentage	%	5.5	

FOR CIVIL Pro.

CIVIL Pro Sig Date BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

Lab ID : CP-RW-2022-06-16-21 **Date: 05-07-2022**

AFTER EXTRACTION - Trail-1

Total Weight of the Sample(gms) : 472

IS Sieve Size (mm)	Weight Retained (gms)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Secified limits as per MORTH specification table 500-23(grading-2)
19	0	0	0.0	100.0	100
13.2	8	8	1.7	98.3	90-100
9.5	75	83	17.6	82.4	70-88
4.75	105	188	39.8	60.2	53-71
2.36	80	268	56.8	43.2	42-58
1.18	36	304	64.4	35.6	34-48
0.6	15	319	67.6	32.4	26-38
0.3	56	375	79.4	20.6	18-28
0.15	25	400	84.7	15.3	12-20
0.075	29	429	90.9	9.1	4-10

AFTER EXTRACTION - Trail-2

Total Weight of the Sample(gm) : 471

IS Sieve Size (mm)	Weight Retained (gms)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Secified limits as per MORTH specification table 500-23(grading-2)
19	0	0	0.0	100.0	100
13.2	6	6	1.3	98.7	90-100
9.5	56	62	13.2	86.8	70-88
4.75	110	172	36.5	63.5	53-71
2.36	75	247	52.4	47.6	42-58
1.18	39	286	60.7	39.3	34-48
0.6	45	331	70.3	29.7	26-38
0.3	65	396	84.1	15.9	18-28
0.15	25	421	89.4	10.6	12-20
0.075	22	443	94.1	5.9	4-10

* The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

CIVIL Pro Sig..... Date..... BANGALORE

R. KARTHIK RECHAN
Authorized Signatory
Quality Manager

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES